## REMARKS

Claims 9-12 are pending. Claims 1-8 have been withdrawn. No claims have been allowed.

Responsive to the Examiner's objection regarding the Abstract, Applicants submit herewith a replacement Abstract in compliance with MPEP § 608.01(b). Applicants have also amended the Specification as indicated to correct obvious typographical errors therein. On page 4, "ca." has been changed to "approximately". No new matter has been added.

Responsive to the Examiner's rejection of Claims 9-12 under 35 U.S.C. §112, second paragraph, Applicants have amended Claims 9-12 to overcome the Examiner's rejections as follows. In Claim 9, antecedent basis has been provided for "melt-off process", which in turn provides antecedent basis for "melt-off process of the glass bar" in Claim 10, and "the amount of the glass melt-off" in Claim 11. Claim 12 has been amended to delete the phrase "the bar-to-bar impact point".

The Examiner rejected Claims 9-11 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,145,200 to Yamazaki et al. (hereinafter "Yamazaki et al. '200") in view of U.S. Patent No. 1,128,175 to Morf (hereinafter "Morf '175"). The Examiner rejected Claim 12 under 35 U.S.C. § 103(a) as being unpatentable over Yamazaki et al. '200 in view of Morf '175 and further in view of U.S. Patent No. 6,098,429 to Mazabraud et al. (hereinafter "Mazabraud et al. '429").

Yamazaki et al. '200 discloses a process for producing optical glass fibers by co-spinning glass melts of two or more different kinds of glass. Referring to Fig. 6, for example, a device includes inner crucible 601 and a surrounding outer crucible 603 having coaxially disposed inner and outer nozzles 612 and 613, respectively. Crucibles 601 and 603 are heated by an electric furnace 605. A first low-loss glass rod 602 for the core of a glass fiber, and a second low-loss glass rod 604 for the cladding layer of the glass fiber are continuously fed into inner crucible 601 and outer crucible 603, respectively. The glass rods 602 and 604 are suspended from feed devices (not shown) provided above crucibles 601 and 603 (*See* col. 10, lines 40-43). The glass rods 602 and 604 are melted into glass melts 610 and 611, respectively, and flow downwardly into outer nozzle 613 of outer crucible 603. As shown in Fig. 6, it may be seen that nozzle 612 of inner crucible 601 is disposed within outer crucible 603 well beneath the surface of melt 611. Additionally, glass rods 607 for a protective layer

of the glass fiber are fed continuously into auxiliary nozzle 606, which surrounds nozzle 613 of outer crucible 603, and are melted to form melt 614. As shown in Fig. 6, it may be seen that nozzle 613 of outer crucible 603 is disposed within auxiliary nozzle 606 well beneath the surface of melt 614. Similar arrangements are shown in Figs. 1-4.

Morf '175 describes various methods by which molten droplets of glass may be thrown onto a surface. For example, as shown in Fig. 3, glass rod *a* is fed downward through graphite tube *b*, the lower end of which is heated by electrodes *c* to melt rod *a*. Molten glass droplets from tube *b* are carried by pressurized air from duct *d* to a surface.

Mazabraud et al. '429 discloses a method of drawing fiber continuously by melting optical fiber preforms 3 and 13 using machine 1, as shown in the Figure. First and second preforms 3 and 13 are held by chucks 5 and 15 of first and second carriages 7 and 17, respectively, and the ends 3A and 13A of preforms 3 and 13 are butt welded to one another using a laser. The preforms 3 and 13 are fed downwardly in machine 1 to a fiber-drawing furnace 9.

Amended independent Claim 9 calls for a process for the remelting of glass bars, including the steps of introducing a glass bar into an upper end of a receiving shell; providing a molten bath having a surface underneath the receiving shell; positioning the receiving shell such that a lower edge of the receiving shell is located at the height of the surface or above it; heating a lower end of the glass bar to a temperature above a softening temperature of the glass, resulting in a melt-off process at the lower end of the glass bar to produce a melt stream; and controlling the melt-off process such that the melt stream continuously enters the molten bath proximate the surface.

Applicants respectfully submit that independent Claim 9, as amended, is not obvious over any combination of Yamazaki et al. '200, Morf '175, or Mazabraud et al. '429, because each of the forgoing references fails to disclose a process for the remelting of glass bars as called for in Claim 9, including in particular, the steps of positioning a receiving shell (in which a glass bar is melted) such that a lower edge of the receiving shell is located at the height of or above the surface of a molten bath, and controlling the melt-off process such that a melt stream continuously enters the molten bath proximate the surface of the molten bath. As shown in the Figure of the present patent application, the melt stream from the melted glass bars 2 at the lower end 1.2 of the receiving shell 1, which is positioned at or above the

surface of the molten bath 7, continuously enters the molten bath 7 proximate the surface 7.1 of the molten bath 7. (*See* Page 7, lines 21-25 of the present patent application).

By contrast, referring to Fig. 6 of Yamazaki et al. '200, for example, glass bars 602 and 604 are melted in inner and outer crucibles 601 and 603, respectively, to produce melts 610 and 611. However, the lower end (inner nozzle 612) of crucible 601 is positioned within outer crucible 603, such that melt 610 enters melt 611 *well beneath the surface* of melt 611. Similarly, the lower end (outer nozzle 613) of crucible 603 is positioned within auxiliary nozzle 606 such that melts 610 and 611 enter melt 614 *well beneath the surface* of melt 614. The same may be observed in the crucibles of Figs. 1-4 of Yamazaki et al. '200. In particular, this arrangement is necessary for the formation of glass fibers which include an inner core layer of one type of glass, such as melt 610 from glass bar 601, and at least one outer cladding layer of another type of glass, such as melt 611 from glass bar 604. (*See* Yamazaki et al. '200 at col. 4, lines 31-45; col. 7, lines 28-30).

Morf '175 and Mazabraud et al. '429 also fail to disclose or suggest controlling a melt-off process such that a melt stream continuously enters a molten bath proximate the surface of the molten bath, as called for in Claim 9.

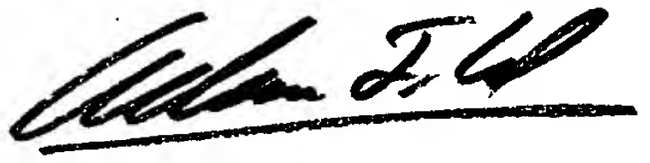
Therefore, Applicants respectfully submit that independent Claim 9, as amended, is not obvious over any combination of Yamazaki et al. '200, Morf '175, and Mazabraud et al. '429. Further, because Claims 10-12 depend from independent Claim 9, Applicants further submit that Claims 10-12 are also not obvious over any combination of the foregoing references.

It is believed that the above represents a complete response to the Official Action and reconsideration is requested. Specifically, Applicants respectfully submit that the application is in condition for allowance and respectfully request allowance thereof.

In the event Applicants have overlooked the need for an additional extension of time, payment of fee, or additional payment of fee, Applicants hereby petition therefore and authorize that any charges be made to Deposit Account No. 02-0385, Baker & Daniels.

Should the Examiner have any further questions regarding any of the foregoing, he is respectfully invited to telephone the undersigned at (260) 424-8000.

Respectfully submitted,



Adam F. Cox
Registration No. 46,644
Attorney for Applicants

AFC/mt

BAKER & DANIELS
111 East Wayne Street, Suite 800
Fort Wayne, IN 46802
Telephone: 260-424-8000
Facsimile: 260-460-1700

Enc. Return Postcard

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